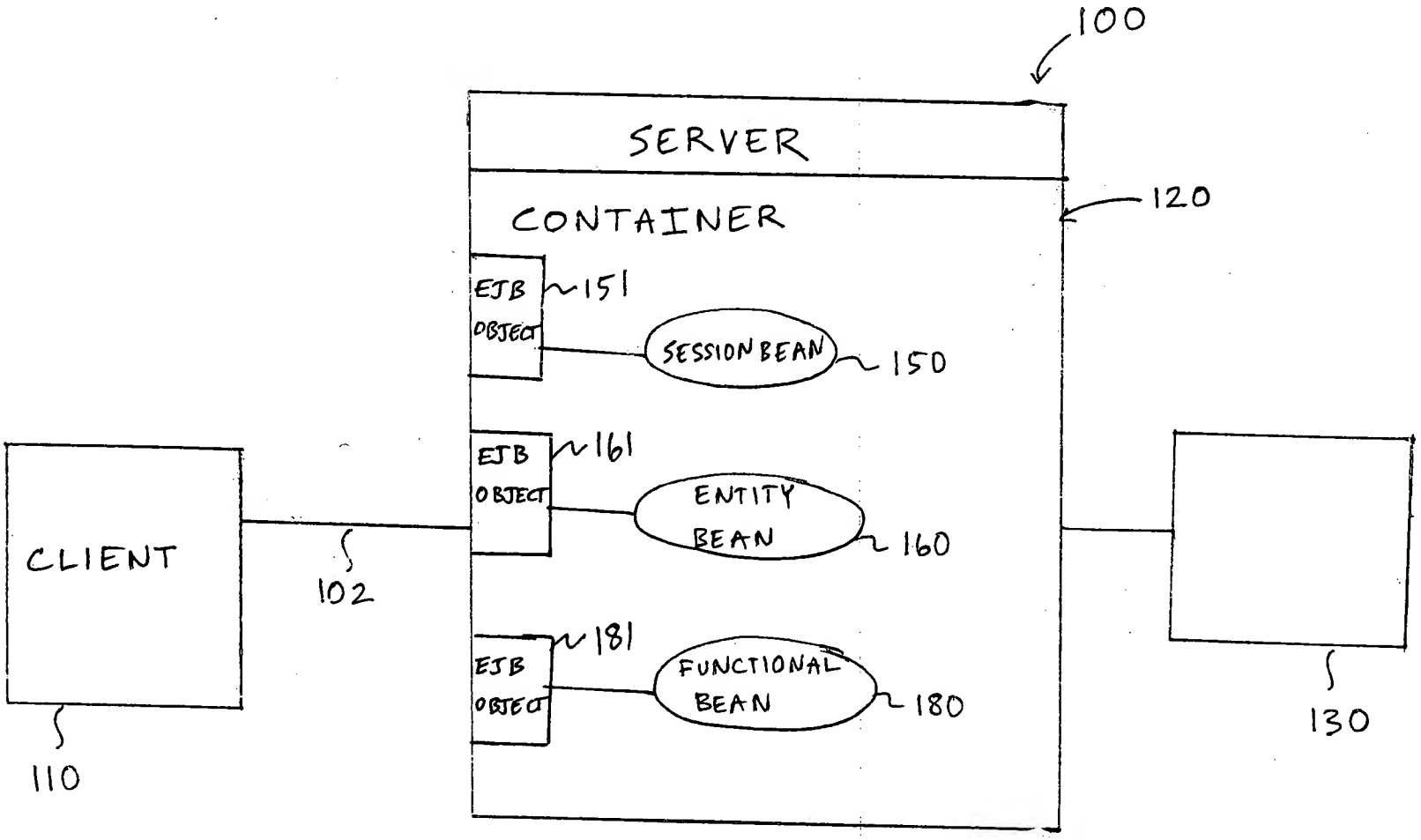
100
SERVER
CONTAINER
120
EJB OBJECT
151
SESSION BEAN
150
EJB OBJECT
161
ENTITY BEAN
160
EJB OBJECT
181
FUNCTIONAL BEAN
180
CLIENT
110
102
130

FIG. 1(a)

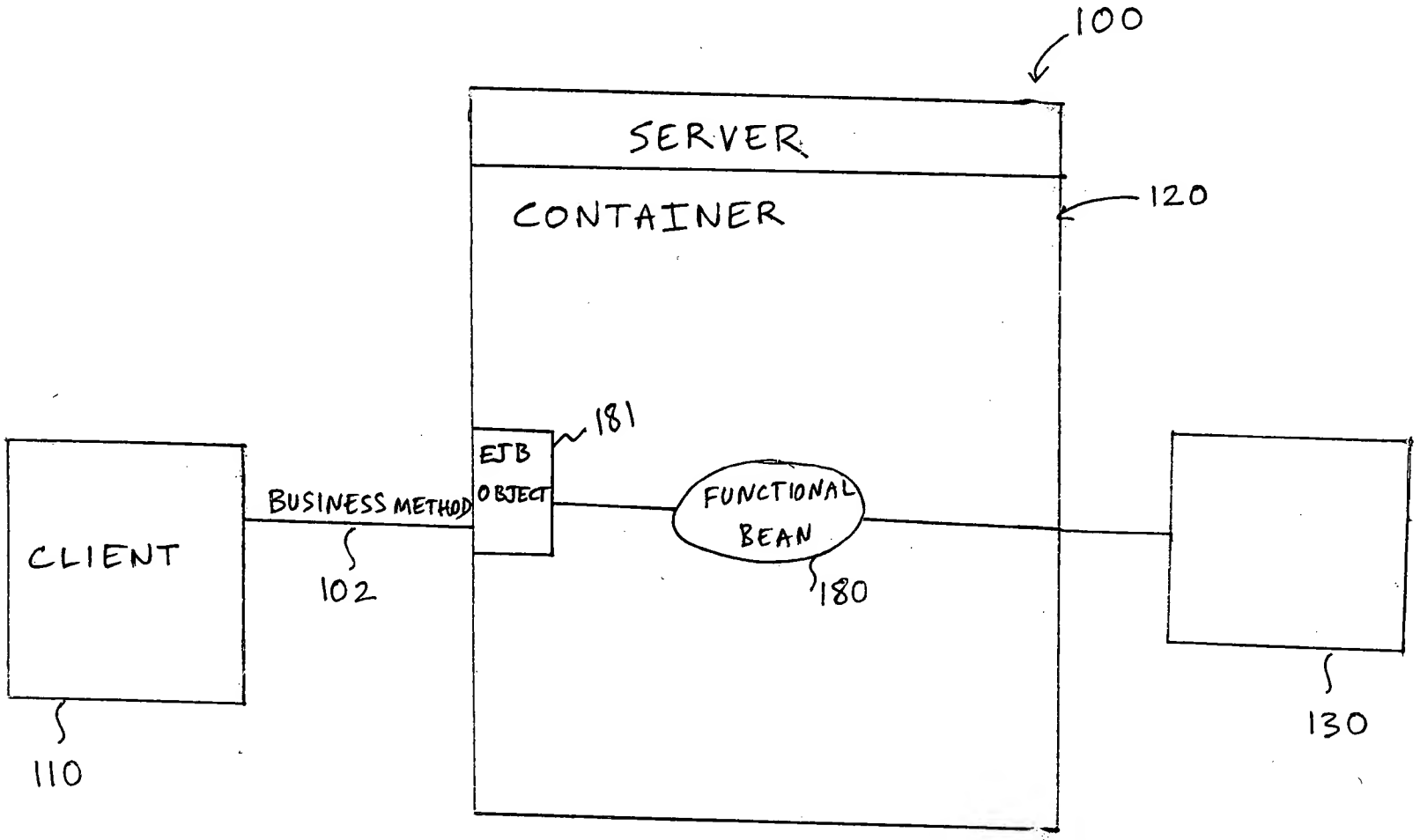
100
SERVER
CONTAINER
120
181
EJB
OBJECT
BUSINESS METHOD
102
CLIENT
110
FUNCTIONAL
BEAN
180
130

FIG. 1(b)

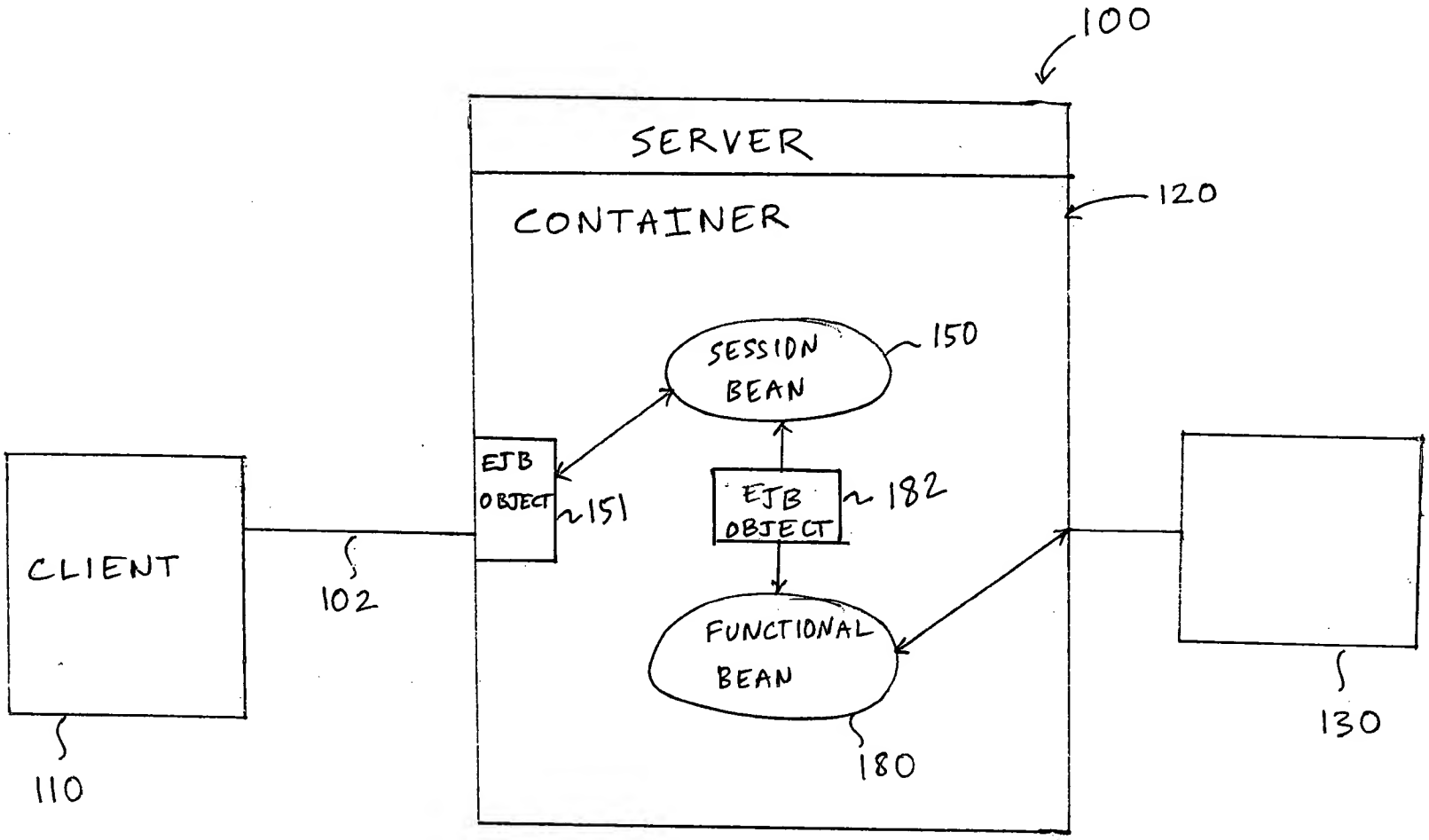
100
SERVER
CONTAINER
120
SESSION BEAN
150
EJB OBJECT
151
EJB OBJECT
182
CLIENT
102
FUNCTIONAL BEAN
180
110
130

FIG. 1(C)

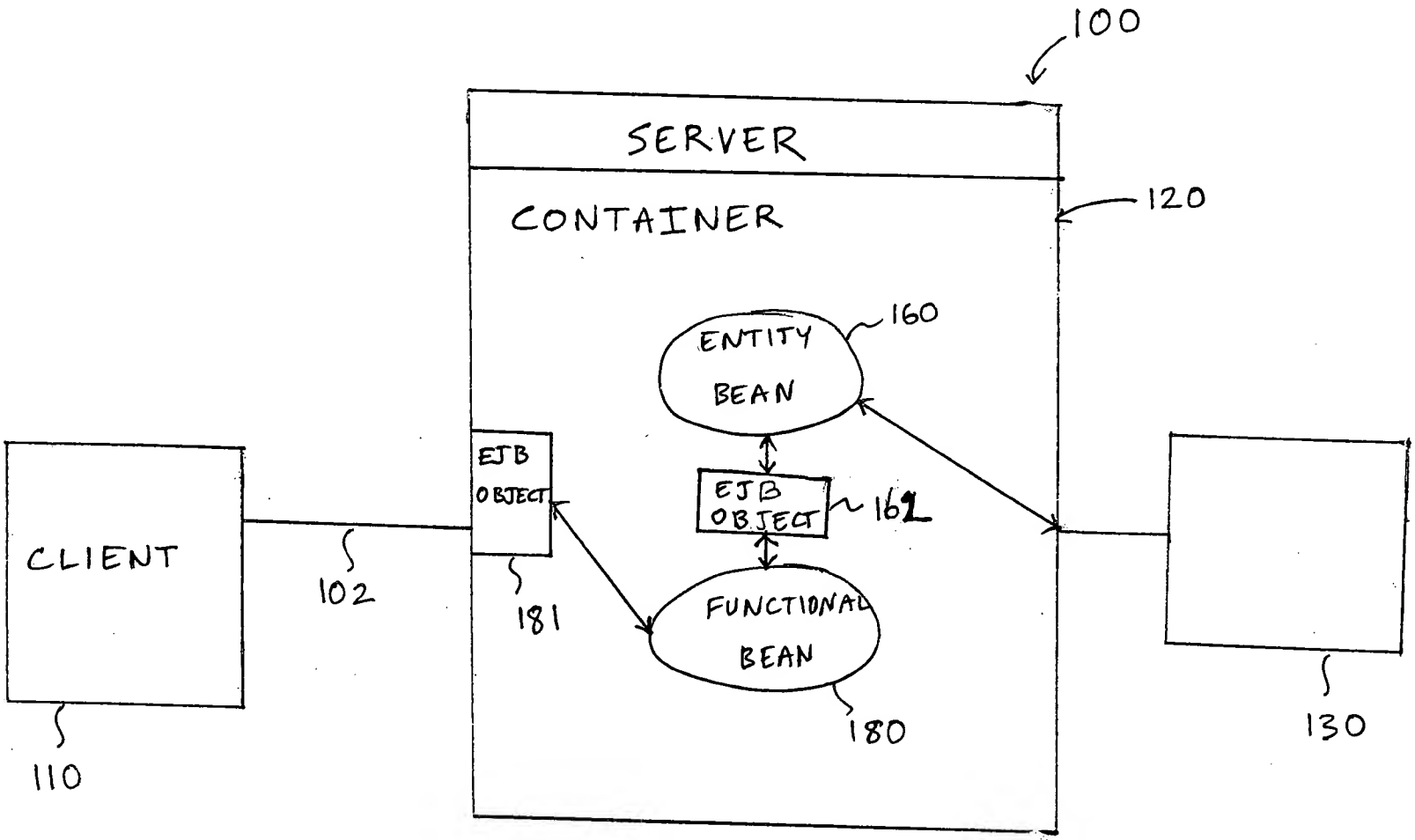
100
SERVER
CONTAINER
120
ENTITY BEAN
160
EJB OBJECT
EJB OBJECT
162
CLIENT
102
181
FUNCTIONAL BEAN
180
110
130

FIG. 1(d)

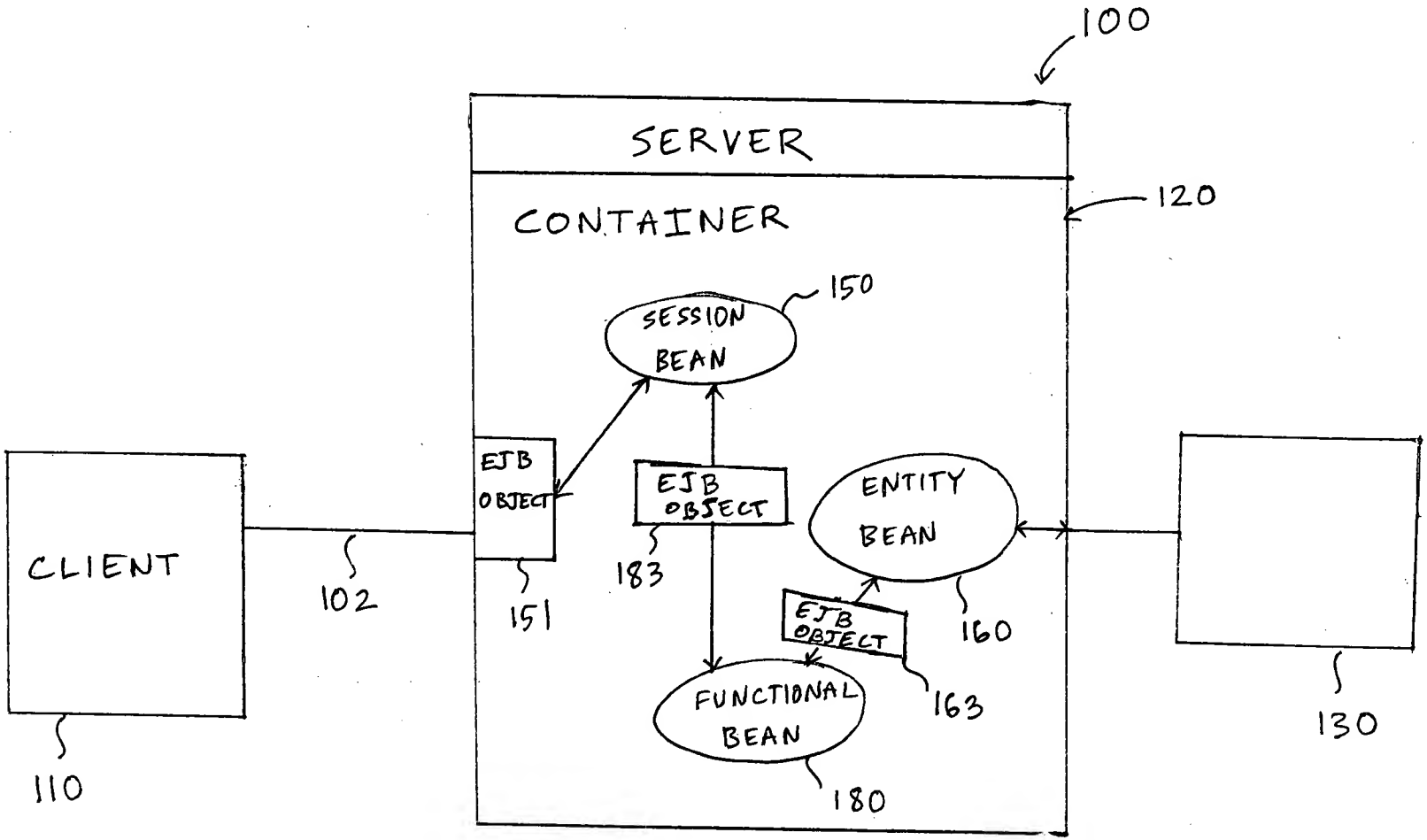
100
SERVER
CONTAINER
120
SESSION BEAN
150
EJB OBJECT
EJB OBJECT
ENTITY BEAN
CLIENT
102
151
183
160
EJB OBJECT
163
FUNCTIONAL BEAN
180
110
130

FIG. 1(e)

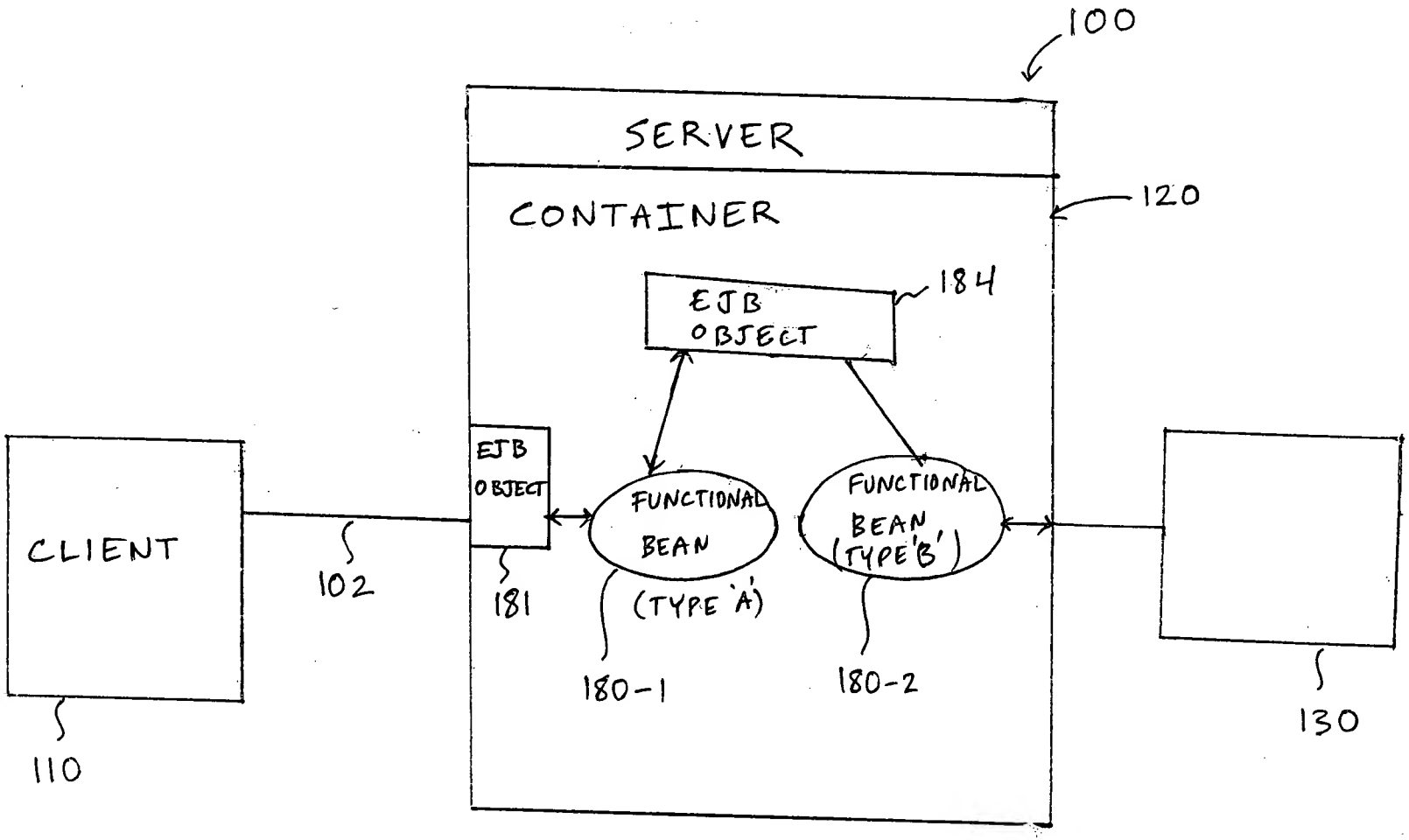
100
SERVER
CONTAINER
120
EJB OBJECT
184
EJB OBJECT
FUNCTIONAL BEAN
(TYPE 'A')
FUNCTIONAL BEAN (TYPE 'B')
CLIENT
102
181
180-1
180-2
110
130

Fig. 1(f)

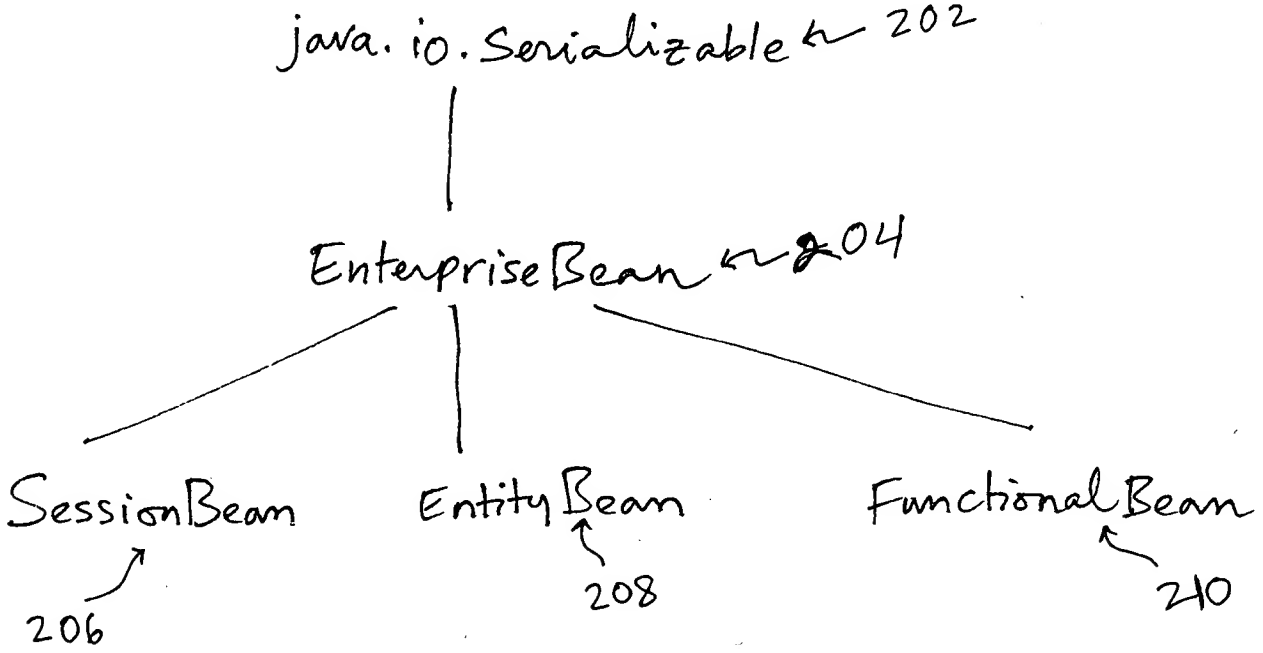
java.io.Serializable
202
EnterpriseBean
204
SessionBean
206
EntityBean
208
FunctionalBean
210

Fig. 2

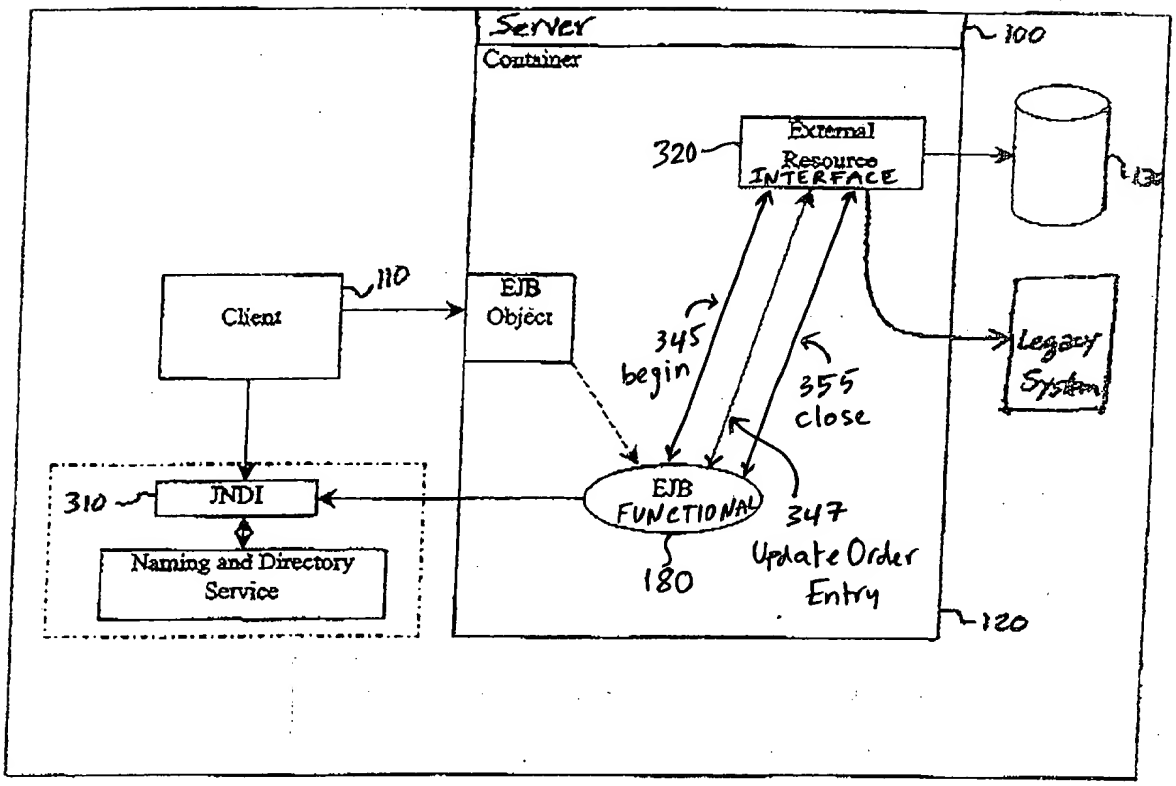
Server
Container
100
External
Resource
INTERFACE
320
Client
110
EJB
Object
345
begin
355
close
Legacy
System
JNDI
310
Naming and Directory
Service
EJB
FUNCTIONAL
180
347
Update Order
Entry
120

Fig 3

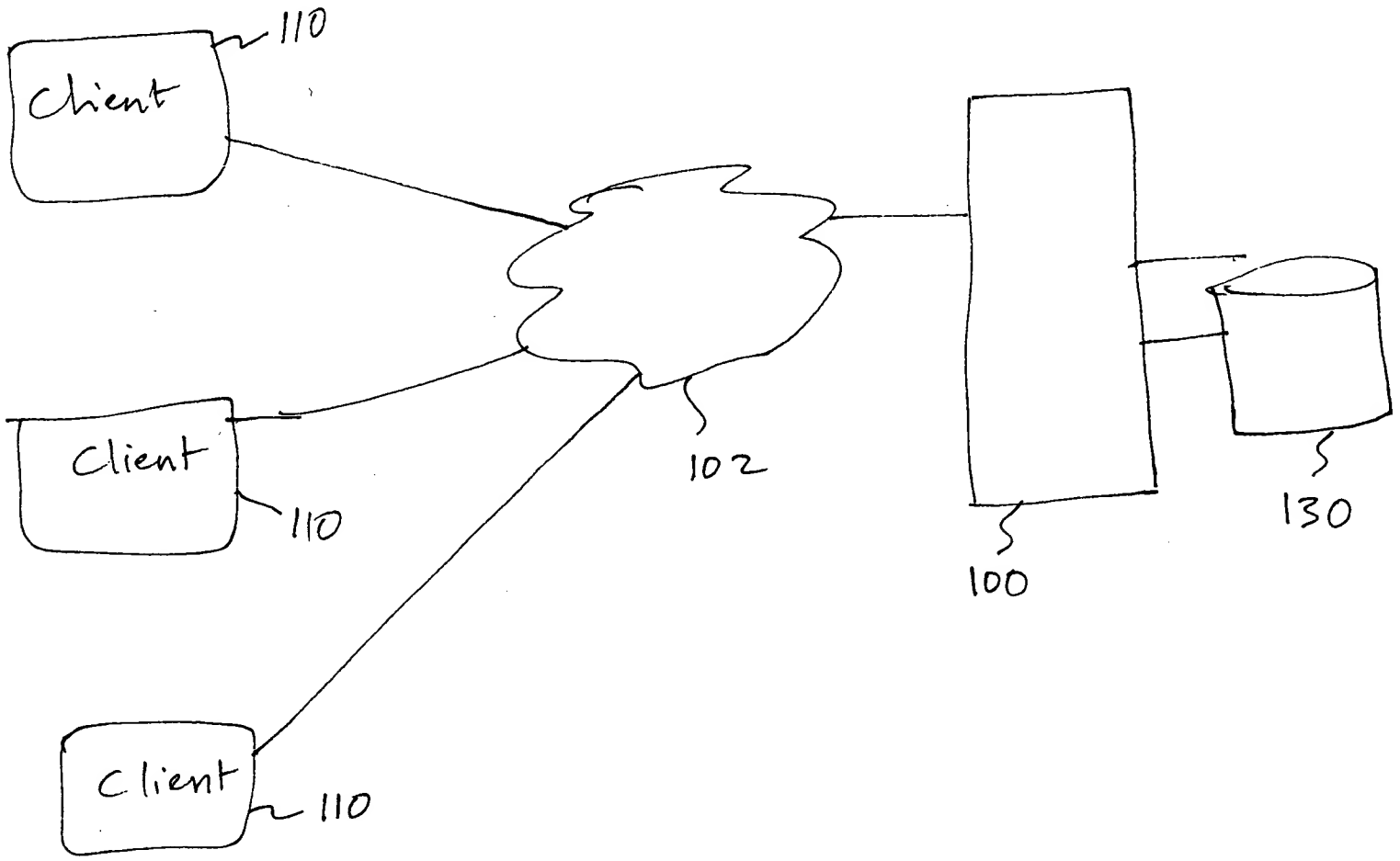

FIG. 4 (a)

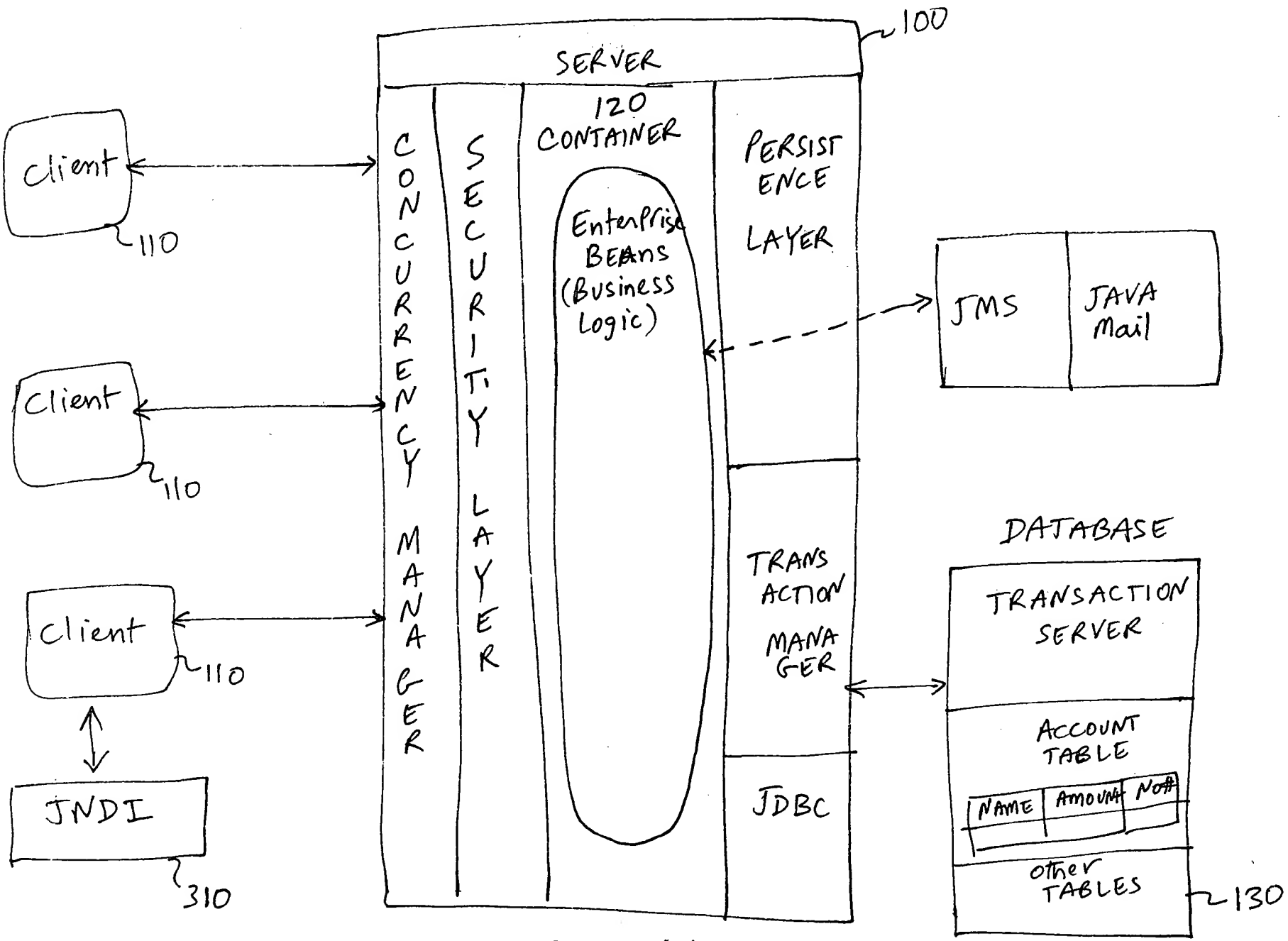
SERVER
100
120
CONTAINER
CONCURRENCY MANAGER
SECURITY LAYER
Enterprise Beans (Business Logic)
PERSISTENCE LAYER
TRANSACTION MANAGER
JDBC
client
110
client
110
client
110
JNDI
310
JMS
JAVA Mail
DATABASE
TRANSACTION SERVER
ACCOUNT TABLE
NAME
AMOUNT
NO#
other TABLES
130

FIG. 4(b)

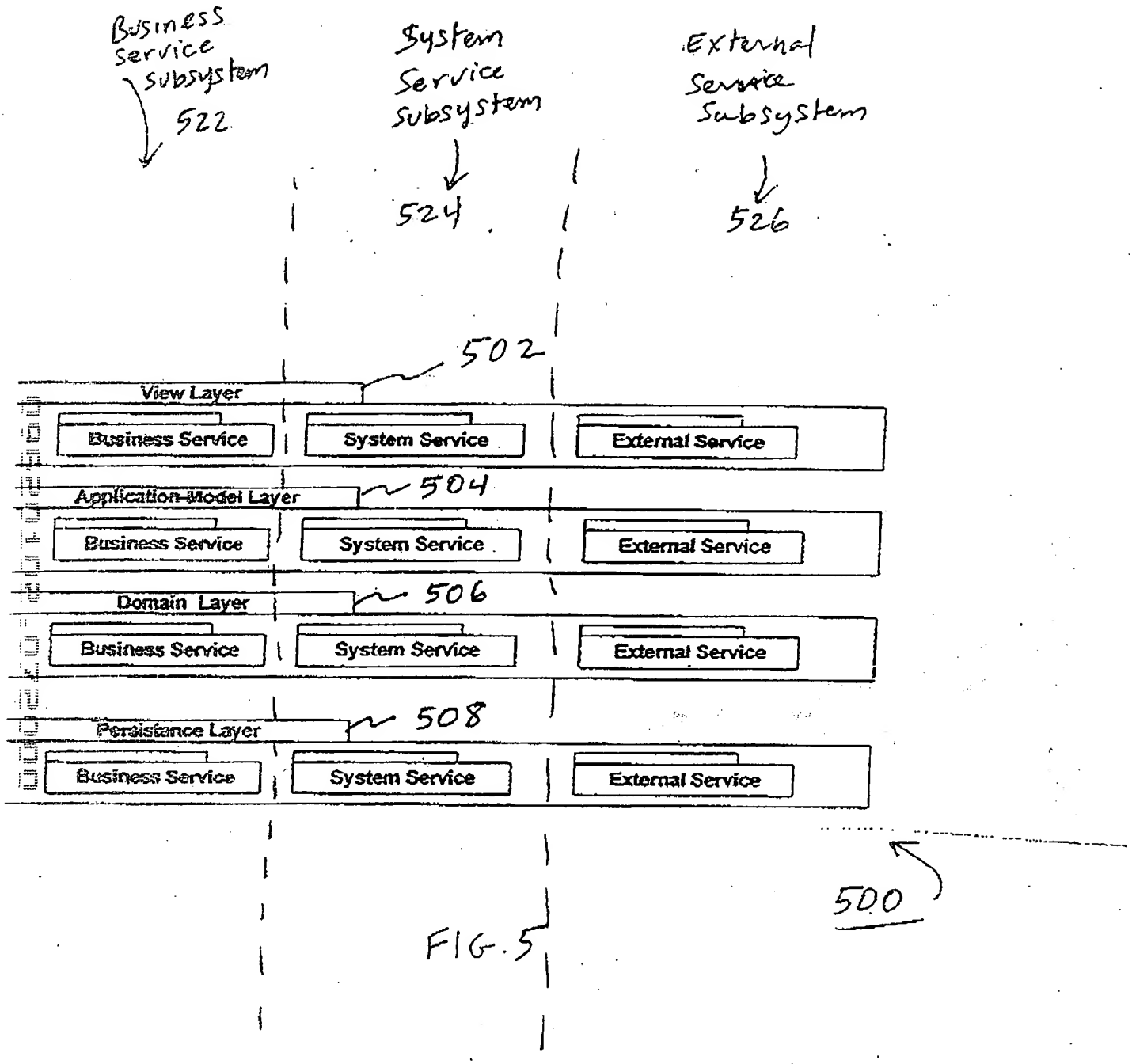
Business Service subsystem
522
System Service subsystem
524
External Service Subsystem
526
502
View Layer
Business Service
System Service
External Service
504
Application Model Layer
Business Service
System Service
External Service
506
Domain Layer
Business Service
System Service
External Service
508
Persistance Layer
Business Service
System Service
External Service
500

FIG. 5

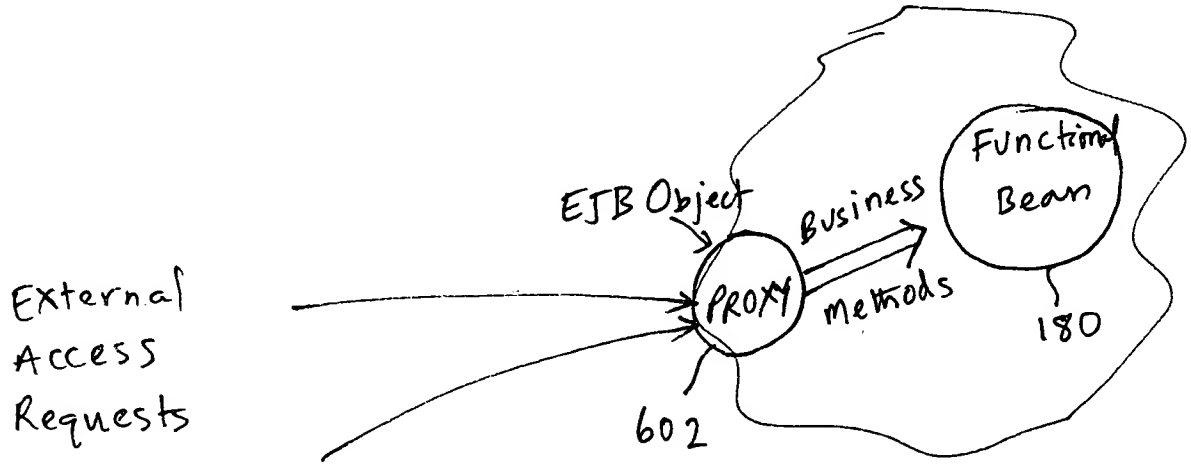

Fig. 6

09620102_072000

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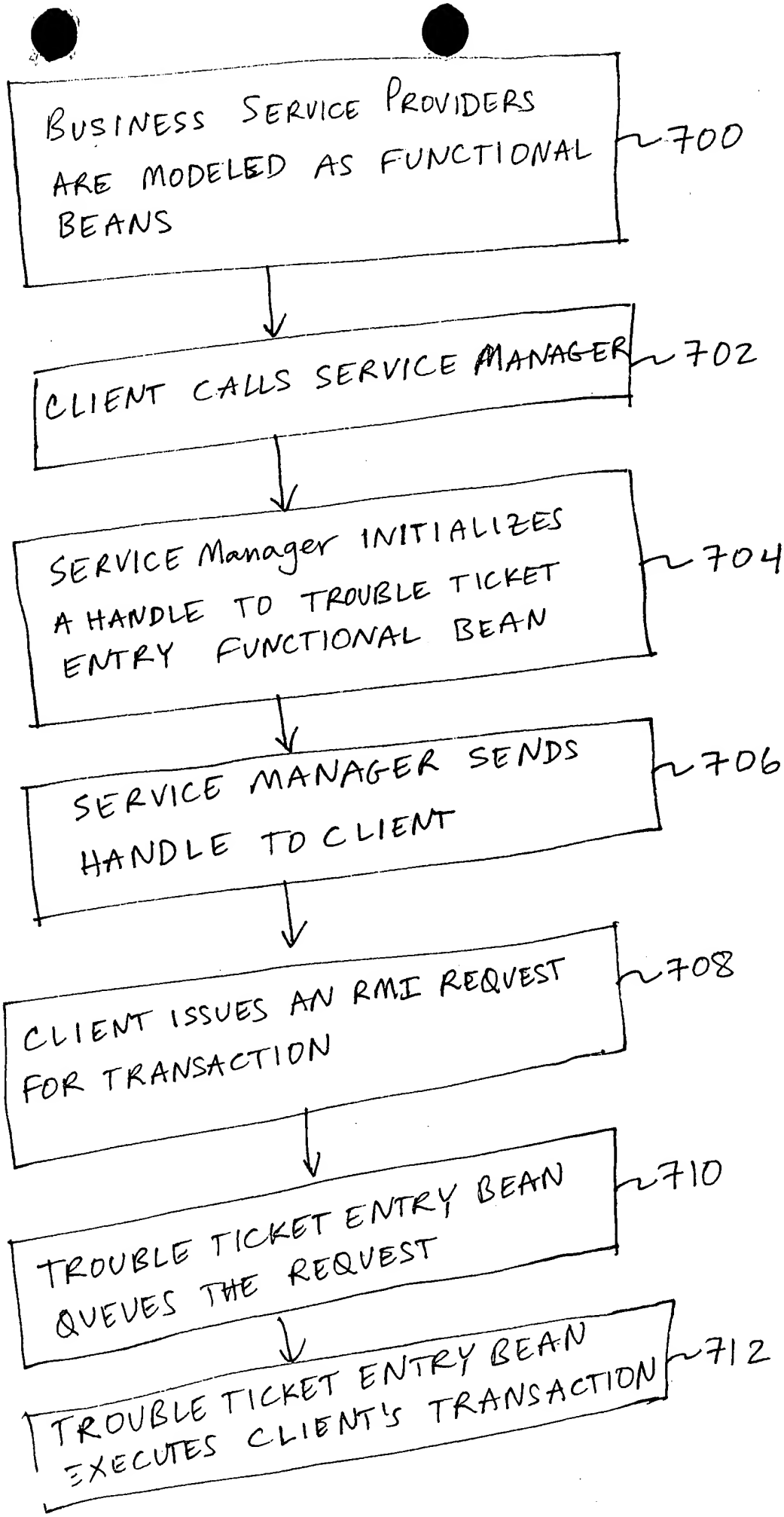

FIG. 7

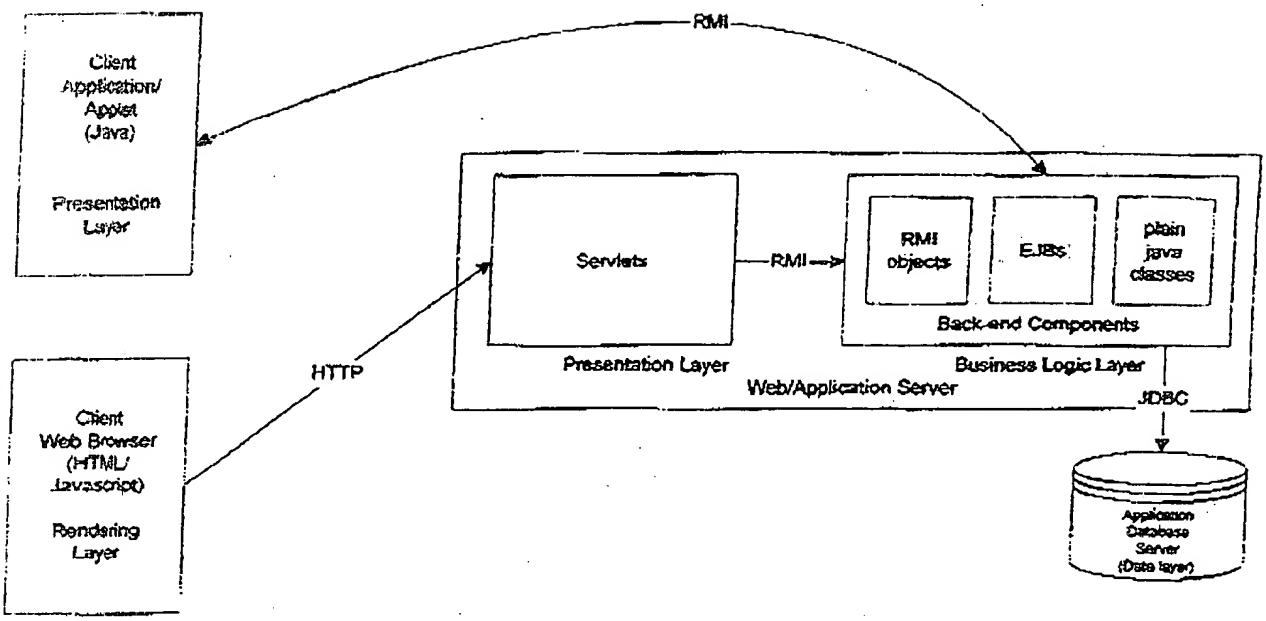
Client Application/ Applet (Java)
Presentation Layer
RMI
Servlets
RMI
RMI objects
EJBs
plain java classes
Back-end Components
Presentation Layer
Business Logic Layer
Web/Application Server
JDBC
HTTP
Client Web Browser (HTML/ Javascript)
Rendering Layer
Application Database Server (Data layer)

Fig 8